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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,861	03/30/2004	Thomas Hubert Van Steenkiste	DP-308959	3460

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SCOTT A. MCBAIN
DELPHI TECHNOLOGIES, INC.
Legal Staff, Mail Code: 480-410-202
P.O. Box 5052
Troy, MI 48007-5052

EXAMINER	
BAREFORD, KATHERINE A	
ART UNIT	**PAPER NUMBER**
1762	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/812,861	VAN STEENKISTE ET AL.	
	Examiner	Art Unit	
	Katherine A. Bareford	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10/15/04* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged. However, the provisional application upon which priority is claimed fails to provide adequate support under 35 U.S.C. 112 for claims 1-22 of this application. The provisional application does not indicate (1) that the mask is pressed against the plastic type material as required by claim 1, part d) and (2) that the particle size can be 250 to 1400 microns as required by claim 12. Therefore, as to claims 1-22, priority only extends to the filing date of the U.S. application, March 30, 2004.

Claim Objections

2. Claims 1 and 12 are objected to because of the following informalities: in claims 1 and 12, the preamble requires a method of "kinetic spraying" and in part f) of claim 1 and part e) of claim 12, spraying is provided. However, it is not required in these sections that the spray is to be kinetic spraying as described in the preamble, and thus it appears that the particles could be melted.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-6 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rayburn (US 3731354) in view of Tawfik et al (US 2004/0101738), Van Steenkiste et al (US 6283386) (hereinafter Van Steenkiste '386) and Hathaway (US 2599710).

Rayburn teaches a method of spray coating a substrate covered by a plastic type material. Column 1, lines 50-60. Rayburn teaches making a rolled capacitor made from a two side metallized plastic dielectic material with thin coating of plastic material applied to head of the metallized layers for holding the capacitor together. Column 1, lines 50-60. After the capacitor is rolled, the plastic covered ends are sprayed with a high velocity spray of molten metal, preferably aluminum, which embeds itself in the plastic coatings between the metallized layers so as to contact the surface as well as the ends of the electrodes, but does not substantially penetrate the dielectric strip substrate. Column 1, line 65 through column 2, line 10, column 7, line 65 through column 6, line 20 and figure 7. The metal spraying must be done at high velocity. Column 6, lines 5-10. This embedding in the plastic to the metal below would "remove" the plastic, as it would be, at the least, pushed out of the way of the metal in the area of application.

Claim 2: the particles can be aluminum. Column 6, lines 1-25.

Claim 3: the substrate can comprise electrical conductor material. Column 4, lines 40-60 (layers 14, 16).

Claim 4: the substrate can be a flexible electrical circuit. See column 5, lines 25-30 showing the flexibility of composite film 10.

Rayburn teaches all the features of these claims except (1) the kinetic spraying and its features and (2) the mask and its features.

However, Tawfik teaches that when spraying metal particles into a substrate to be embedded, it is desirable to use either thermal spraying or cold gas dynamic spraying (=kinetic spraying). See paragraphs [0014], [0016], [0022], [0043] and [0049]. The use of cold gas dynamic spraying prevents problems form overheating during coating from occurring. Paragraphs [0022] and [0049].

Van Steenkiste '386 notes that kinetic spraying and cold gas dynamic spraying are equivalent. Column1, lines 15-25. Van Steenkiste '386 also provides a desirable method of kinetic spraying of metals. Column 1, lines 55-60. Particle sizes can be in excess of 100 microns, up to 106 microns. Column 2, lines 20-30 and column 5, lines 45-55. For spraying a supersonic nozzle having a converging region connected to a diverging region through a throat is provided. Figure 2 and column 3, lines 40-65. A flow of heated main gas is directed through the nozzle. Column 3, lines 30-40. The particles are entrained in the flow of the heated main gas and accelerated to a velocity sufficient to result in the particles impacting and adhering to the substrate. Column 1, line 55 through column 2, line 10. The particles can be aluminum.

Column 5, lines 25-30. The velocity can be greater than 1000 m/s. Column 1, lines 60-68. The gas temperature can be 650 degrees C. Column 1, lines 60-68.

Hathaway teaches that when coating a substrate with sprayed metal, such as when making electrical wiring, it is known to apply a mask to both sides of the substrate to provide a pattern to be sprayed. See column 3, lines 40-70 and column 4, lines 10-25.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rayburn to use kinetic spraying as suggested by Tawfik in order to desirably embed particles in the plastic layer without overheating the substrate, because Rayburn teaches thermally spraying metal particles to be embedded in a plastic layer on a substrate, and Tawfik teaches that when spraying metal particles to be embedded, it is desirable to use kinetic spraying to replace thermal spraying in order to prevent overheating of the substrate. It would further have been obvious to modify Rayburn in view of Tawfik to use the kinetic spraying features taught by Van Steenkiste '386 with an expectation of providing a desirably kinetic sprayed coating, because Rayburn in view of Tawfik suggests using kinetic spraying to provide the sprayed metal and Van Steenkiste '386 provides a desirable form of kinetic spraying to apply metal particles. As to the further distance between the substrate and nozzle (claim 5) and traverse speed (claim 10), it would have been obvious to one of ordinary skill in the art to optimize the features when performing the process of Rayburn in view of Tawfik and Van Steenkiste '386, because Van Steenkiste '386 provides spraying features for various sizes of particles and materials, and one would perform routine experimentation to optimize the positioning and speeds for the specific materials and purposes used. It would further have been obvious to modify Rayburn in view of

Tawfik and Van Steenkiste '386 to use the mask as suggested by Hathaway in order to provide coating to the specifically desired areas, because Rayburn in view of Tawfik and Van Steenkiste '386 teach applying a sprayed metal to a substrate and Hathaway teaches that when applying sprayed metal to a substrate, it is desirable to use an applied mask when a specific area is desirable to be sprayed.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rayburn in view of Tawfik , Van Steenkiste '386 and Hathaway as applied to claims 1-6 and 9-11 above, and further in view of Martyniak (US 4263341).

Rayburn in view of Tawfik , Van Steenkiste '386 and Hathaway teach all the features of this claim except the material of the mask.

However, Martyniak teaches that it is well known to use a mask of stainless steel, for example, when applying a sprayed metal coating to a substrate. Column 5, lines 5-50.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rayburn in view of Tawfik , Van Steenkiste '386 and Hathaway to use a stainless steel mask as suggested by Martyniak with an expectation of providing a desirable mask for coating because Rayburn in view of Tawfik , Van Steenkiste '386 and Hathaway suggest using a mask when metal spray coating and Marytniak teaches that a desirable mask for metal spray coating is made from stainless steel.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rayburn in view of Tawfik , Van Steenkiste '386 and Hathaway as applied to claims 1-6 and 9-11 above, and further in view of Kashirin et al (US 6402050).

Rayburn in view of Tawfik , Van Steenkiste '386 and Hathaway teach all the features of this claim except entering the particles in the flow of gas at a point in the diverging region.

However, Kashirin teaches that in the art of cold gas dynamic spraying (kinetic spraying) it is desirable to provide the particles into the flow of gas at a point in the diverging region in order to reduce wear on the nozzle. Column 3, lines 1-25 and column 2, lines 1-20 and figure 1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rayburn in view of Tawfik , Van Steenkiste '386 and Hathaway to feed the particles into the diverging region as suggested by Kashirin with an expectation of providing a desirably less worn spray system because Rayburn in view of Tawfik , Van Steenkiste '386 and Hathaway suggest using a kinetic spraying process and Kashirin teaches when kinetic spraying it is desirable to provide the powder in the diverging region to prevent wear on the nozzle.

8. Claims 12-16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rayburn (US 3731354) in view of Tawfik et al (US 2004/0101738) and Van Steenkiste (US 6623796) (hereinafter Van Steenkiste '796).

Rayburn teaches a method of spray coating a substrate covered by a plastic type material. Column 1, lines 50-60. Rayburn teaches making a rolled capacitor made from a two side metallized plastic dielectic material with thin coating of plastic material applied to head of the

metallized layers for holding the capacitor together. Column 1, lines 50-60. After the capacitor is rolled, the plastic covered ends are sprayed with a high velocity spray of molten metal, preferably aluminum, which embeds itself in the plastic coatings between the metallized layers so as to contact the surface as well as the ends of the electrodes, but does not substantially penetrate the dielectric strip substrate. Column 1, line 65 through column 2, line 10, column 7, line 65 through column 6, line 20 and figure 7. The metal spraying must be done at high velocity. Column 6, lines 5-10. This embedding in the plastic to the metal below would "remove" the plastic, as it would be, at the least, pushed out of the way of the metal in the area of application.

Claim 13: the particles can be aluminum. Column 6, lines 1-25.

Claim 14: the substrate can comprise electrical conductor material. Column 4, lines 40-60 (layers 14, 16).

Claim 15: the substrate can be a flexible electrical circuit. See column 5, lines 25-30 showing the flexibility of composite film 10.

Rayburn teaches all the features of these claims except the kinetic spraying and its features.

However, Tawfik teaches that when spraying metal particles into a substrate to be embedded, it is desirable to use either thermal spraying or cold gas dynamic spraying (=kinetic spraying). See paragraphs [0014], [0016], [0022], [0043] and [0049]. The use of cold gas dynamic spraying prevents problems form overheating during coating from occurring. Paragraphs [0022] and [0049].

Van Steenkiste '796 notes that kinetic spraying and cold gas dynamic spraying are equivalent. Column 1, lines 20-30. Van Steenkiste '796 also provides a desirable method of kinetic spraying of metals. Column 2, lines 40-55. Particle sizes can be 250 microns in diameter. Column 2, lines 40-55. For spraying a supersonic nozzle having a converging region connected to a diverging region through a throat is provided. Figure 2 and column 3, line 45 through column 4, line 10. A flow of heated main gas is directed through the nozzle. Column 3, lines 40-55. The particles are entrained in the flow of the heated main gas and accelerated to a velocity sufficient to result in the particles impacting and adhering to the substrate. Column 2, lines 40-55. The particles can be metal. Column 4, lines 50-60. The velocity can be 300-1200 m/s. Column 5, lines 30-40. The gas temperature can be 1200 degrees F. Column 5, lines 50-55.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rayburn to use kinetic spraying as suggested by Tawfik in order to desirably embed particles in the plastic layer without overheating the substrate, because Rayburn teaches thermally spraying metal particles to be embedded in a plastic layer on a substrate, and Tawfik teaches that when spraying metal particles to be embedded, it is desirable to use kinetic spraying to replace thermal spraying in order to prevent overheating of the substrate. It would further have been obvious to modify Rayburn in view of Tawfik to use the kinetic spraying features taught by Van Steenkiste '796 with an expectation of providing a desirably kinetic sprayed coating, because Rayburn in view of Tawfik suggests using kinetic spraying to provide the sprayed metal and Van Steenkiste '796 provides a desirable form of kinetic spraying to apply metal particles. As to the

further distance between the substrate and nozzle (claim 16) and traverse speed (claim 19), it would have been obvious to one of ordinary skill in the art to optimize the features when performing the process of Rayburn in view of Tawfik and Van Steenkiste '796, because Van Steenkiste '796 provides spraying features for various sizes of particles and materials, and one would perform routine experimentation to optimize the positioning and speeds for the specific materials and purposes used.

9. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rayburn in view of Tawfik and Van Steenkiste '796 as applied to claims 12-16 and 18-20 above, and further in view of Kashirin et al (US 6402050).

Rayburn in view of Tawfik and Van Steenkiste '796 teach all the features of this claim except entering the particles in the flow of gas at a point in the diverging region.

However, Kashirin teaches that in the art of cold gas dynamic spraying (kinetic spraying) it is desirable to provide the particles into the flow of gas at a point in the diverging region in order to reduce wear on the nozzle. Column 3, lines 1-25 and column 2, lines 1-20 and figure 1. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rayburn in view of Tawfik and Van Steenkiste '796 to feed the particles into the diverging region as suggested by Kashirin with an expectation of providing a desirably less worn spray system because Rayburn in view of Tawfik and Van Steenkiste '796 suggest using a kinetic spraying process and Kashirin teaches when kinetic spraying it is desirable to provide the powder in the diverging region to prevent wear on the nozzle.

10. Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rayburn in view of Tawfik and Van Steenkiste '796 as applied to claims 12-16 and 18-20 above, and further in view of Martyniak (US 4263341).

Rayburn in view of Tawfik and Van Steenkiste '796 teach all the features of these claims except the mask.

However, Martyniak teaches that it is well known to use a mask of stainless steel, for example, when applying a sprayed metal coating to a substrate to provide coating in a desired area. Column 5, lines 5-50.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rayburn in view of Tawfik and Van Steenkiste '796 to use a stainless steel mask as suggested by Martyniak with an expectation of providing coating to specifically desired areas because Rayburn in view of Tawfik and Van Steenkiste '796 suggest applying a sprayed metal to a substrate and Marytniak teaches that when applying a sprayed metal to a substrate it is desirable to use an applied mask when specific areas are to be sprayed and that a desirable mask for metal spray coating is made from stainless steel.

11. Claims 1-6 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rayburn (US 3731354) in view of Tawfik et al (US 2004/0101738), Van Steenkiste (US 6623796) (hereinafter Van Steenkiste '796) and Hathaway (US 2599710).

Rayburn teaches a method of spray coating a substrate covered by a plastic type material. Column 1, lines 50-60. Rayburn teaches making a rolled capacitor made from a two side metallized plastic dielectic material with thin coating of plastic material applied to head of the metallized layers for holding the capacitor together. Column 1, lines 50-60. After the capacitor is rolled, the plastic covered ends are sprayed with a high velocity spray of molten metal, preferably aluminum, which embeds itself in the plastic coatings between the metallized layers so as to contact the surface as well as the ends of the electrodes, but does not substantially penetrate the dielectric strip substrate. Column 1, line 65 through column 2, line 10, column 7, line 65 through column 6, line 20 and figure 7. The metal spraying must be done at high velocity. Column 6, lines 5-10. This embedding in the plastic to the metal below would "remove" the plastic, as it would be, at the least, pushed out of the way of the metal in the area of application.

Claim 13: the particles can be aluminum. Column 6, lines 1-25.

Claim 14: the substrate can comprise electrical conductor material. Column 4, lines 40-60 (layers 14, 16).

Claim 15: the substrate can be a flexible electrical circuit. See column 5, lines 25-30 showing the flexibility of composite film 10.

Rayburn teaches all the features of these claims except the kinetic spraying and its features.

However, Tawfik teaches that when spraying metal particles into a substrate to be embedded, it is desirable to use either thermal spraying or cold gas dynamic spraying (=kinetic spraying). See paragraphs [0014], [0016], [0022], [0043] and [0049]. The use of cold gas

dynamic spraying prevents problems form overheating during coating from occurring. Paragraphs [0022] and [0049].

Van Steenkiste '796 notes that kinetic spraying and cold gas dynamic spraying are equivalent. Column 1, lines 20-30. Van Steenkiste '796 also provides a desirable method of kinetic spraying of metals. Column 2, lines 40-55. Particle sizes can be 250 microns in diameter or less. Column 2, lines 40-55. For spraying a supersonic nozzle having a converging region connected to a diverging region through a throat is provided. Figure 2 and column 3, line 45 through column 4, line 10. A flow of heated main gas is directed through the nozzle. Column 3, lines 40-55. The particles are entrained in the flow of the heated main gas and accelerated to a velocity sufficient to result in the particles impacting and adhering to the substrate. Column 2, lines 40-55. The particles can be metal. Column 4, lines 50-60. The velocity can be 300-1200 m/s. Column 5, lines 30-40. The gas temperature can be 1200 degrees F. Column 5, lines 50-55.

Hathaway teaches that when coating a substrate with sprayed metal, such as when making electrical wiring, it is known to apply a mask to both sides of the substrate to provide a pattern to be sprayed. See column 3, lines 40-70 and column 4, lines 10-25.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rayburn to use kinetic spraying as suggested by Tawfik in order to desirably embed particles in the plastic layer without overheating the substrate, because Rayburn teaches thermally spraying metal particles to be embedded in a plastic layer on a substrate, and Tawfik teaches that when spraying metal particles to be embedded, it is desirable to use kinetic spraying

to replace thermal spraying in order to prevent overheating of the substrate. It would further have been obvious to modify Rayburn in view of Tawfik to use the kinetic spraying features taught by Van Steenkiste '796 with an expectation of providing a desirably kinetic sprayed coating, because Rayburn in view of Tawfik suggests using kinetic spraying to provide the sprayed metal and Van Steenkiste '796 provides a desirable form of kinetic spraying to apply metal particles. As to the further distance between the substrate and nozzle (claim 5) and traverse speed (claim 10), it would have been obvious to one of ordinary skill in the art to optimize the features when performing the process of Rayburn in view of Tawfik and Van Steenkiste '796, because Van Steenkiste '796 provides spraying features for various sizes of particles and materials, and one would perform routine experimentation to optimize the positioning and speeds for the specific materials and purposes used. It would further have been obvious to modify Rayburn in view of Tawfik and Van Steenkiste '796 to use the mask as suggested by Hathaway in order to provide coating to the specifically desired areas, because Rayburn in view of Tawfik and Van Steenkiste '386 teach applying a sprayed metal to a substrate and Hathaway teaches that when applying sprayed metal to a substrate, it is desirable to use an applied mask when a specific area is desirable to be sprayed.

12. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rayburn in view of Tawfik , Van Steenkiste '796 and Hathaway as applied to claims 1-6 and 9-11 above, and further in view of Kashirin et al (US 6402050).

Rayburn in view of Tawfik, Van Steenkiste '796 and Hathaway teach all the features of this claim except entering the particles in the flow of gas at a point in the diverging region.

However, Kashirin teaches that in the art of cold gas dynamic spraying (kinetic spraying) it is desirable to provide the particles into the flow of gas at a point in the diverging region in order to reduce wear on the nozzle. Column 3, lines 1-25 and column 2, lines 1-20 and figure 1. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rayburn in view of Tawfik, Van Steenkiste '796 and Hathaway to feed the particles into the diverging region as suggested by Kashirin with an expectation of providing a desirably less worn spray system because Rayburn in view of Tawfik, Van Steenkiste '796 and Hathaway suggest using a kinetic spraying process and Kashirin teaches when kinetic spraying it is desirable to provide the powder in the diverging region to prevent wear on the nozzle.

13. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rayburn in view of Tawfik, Van Steenkiste '796 and Hathaway as applied to claims 1-6 and 9-11 above, and further in view of Martyniak (US 4263341).

Rayburn in view of Tawfik, Van Steenkiste '796 and Hathaway teach all the features of these claims except the material of the mask.

However, Martyniak teaches that it is well known to use a mask of stainless steel, for example, when applying a sprayed metal coating to a substrate to provide coating in a desired area. Column 5, lines 5-50.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rayburn in view of Tawfik ,Van Steenkiste '796 and Hathaway to use a stainless steel mask as suggested by Martyniak with an expectation of providing a desirable mask for coating, because Rayburn in view of Tawfik ,Van Steenkiste '796 and Hathaway suggest applying a sprayed metal to a substrate using a mask and Marytniak teaches a desirable mask for metal spray coating is made from stainless steel.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine A. Bareford whose telephone number is (571) 272-1413. The examiner can normally be reached on M-F(6:30-4:00) with the First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P. Beck can be reached on (571) 272-1415. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and for After Final communications.

Other inquiries can be directed to the Tech Center 1700 telephone number at (571) 272-1700.

Furthermore, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KATHERINE BAREFORD
PRIMARY EXAMINER